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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,580	04/20/2001	Alexander Aptus	300136300015	9171
23485	7590	06/17/2004	EXAMINER	
JINAN GLASGOW			CURCIO, JAMES A F	
P O BOX 28539			ART UNIT	
RALEIGH, NC 276118539			PAPER NUMBER	

2132

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/838,580

Applicant(s)

APTUS ET AL.

Examiner

James Curcio

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any - earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-8, 12-27, and 31-40 rejected under 35 U.S.C. 102(e) as being anticipated by Underwood (US006523027B1).

As per claims 1 and 20, Underwood discloses the following steps and means:

generating a language-neutral representation . . . (UML – col. 97:25-60);

displaying a diagram representing the source code . . . (UML-diagram - Fig. 36 and associated text; types of UML diagrams - col. 97:25 to col. 98:50; generation of Java Class files - col. 189:7-21; association between java file and activity/class diagram element col. 201:14-23);

receiving an indication of a selected one of the elements (UML-diagram - Fig. 36 and associated text; types of UML diagrams - col. 97:25 to col. 98:50; generation of Java Class files - col. 189:7-21; association between java file and activity/class diagram element col. 201:14-23);

determining which file is associated with the selected element (UML-diagram - Fig. 36 and associated text; tight integration of Rational Rose modeling tool and Visual

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Source Safe file version control application – col. 90:35-49; types of UML diagrams including class and work flow (i.e. activity) diagrams - col. 97:25 to col. 98:50; generation of Java class files - col. 189:7-21; association between java file and activity/class diagram element - col. 201:14-23);

receiving an indication of a selection of a command . . . (reflect the status - col. 287:20-27);

invoking the version control system to perform the selected command . . . (Fig. 110-111, 113-115 and associated text; Source Safe Usage: Check Out – col. 286:56 to col. 287-33; Source Safe Usage: Check In – col. 287:35-48).

As per claim 21, Underwood discloses the following steps:

receiving an indication of a selection of an element of a diagram having corresponding source code (UML-diagram - Fig. 36 and associated text; types of UML diagrams - col. 97:25 to col. 98:50; generation of Java Class files - col. 189:7-21; association between java file and activity/class diagram element col. 201:14-23);

receiving an indication of a version control command . . . (Fig. 110-111, 113-115 and associated text; tight integration of Rational Rose modeling tool and Visual Source Safe file version control application – col. 90:35-49; reflect the status and Source Safe Usage: Check Out – col. 286:56 to col. 287-33; Source Safe Usage: Check In – col. 287:35-48);

responsive to the receipt . . . , performing the version control command . . . (Fig. 110-111, 113-115 and associated text; reflect the status and Source Safe Usage: Check Out – col. 286:56 to col. 287:33; Source Safe Usage: Check In – col. 287:35-48).

As per claim 38, Underwood discloses the following system elements:
a secondary storage device . . . (Fig 1A – element 120 and associated text);
a memory . . . (Fig 1A – elements 114 and associated text; UML-diagram - Fig. 36 and associated text; types of UML diagrams - col. 97:25 to col. 98:50; generation of Java Class files - col. 189:7-21; association between java file and activity/class diagram element col. 201:14-23; UML-diagram - Fig. 36 and associated text; Fig. 110-111, 113-115 and associated text; reflect the status and Source Safe Usage: Check Out – col. 286:56 to col. 287:33; Source Safe Usage: Check In – col. 287:35-48);
a processor . . . (Fig 1A – element 110 and associated text).

As per claim 39, Underwood discloses the following steps:
receiving an indication of a selection of an element of a diagram . . . (UML-diagram - Fig. 36 and associated text; types of UML diagrams - col. 97:25 to col. 98:50; generation of Java Class files - col. 189:7-21; association between java file and activity/class diagram element col. 201:14-23);

receiving an indication of a version control command to be performed on the corresponding source code (Fig. 110-111, 113-115 and associated text; tight integration of Rational Rose modeling tool and Visual Source Safe file version control application –

col. 90:35-49; reflect the status and Source Safe Usage: Check Out – col. 286:56 to col. 287:33; Source Safe Usage: Check In – col. 287:35-48);

responsive to the receipt . . . , performing the version control command . . . (Fig. 110-111, 113-115 and associated text; reflect the status and Source Safe Usage: Check Out – col. 286:56 to col. 287:33; Source Safe Usage: Check In – col. 287:35-48).

As per claim 40, Underwood discloses the following system elements:

a first computer including a memory containing a software development tool, . . . , and a client component of the version control system; a secondary storage containing a working directory; a processor for running the software development tool (abstract; col. 2:6-35; Fig. 1A - elements 114, 120, and 110 and associated text; col. 19:29 to col. 20:21);

a second computer including a memory . . . ; a secondary storage . . . ; and a processor . . . (abstract; col. 2:6-35; Fig. 1A – elements 114, 120, and 110 and associated text; Fig. 1D – element 160 and associated text; col. 19:29 to col. 20:21);

a network connecting the first and second computer (abstract; col. 2:6-35; Fig. 1A – element 135 and associated text);

wherein the software development tool on the first computer . . . (UML-diagram - Fig. 36 and associated text; types of UML diagrams - col. 97:25 to col. 98:50; generation of Java Class files - col. 189:7-21; association between java file and activity/class diagram element col. 201:14-23; Fig. 110-111, 113-115 and associated text; tight integration of Rational Rose modeling tool and Visual Source Safe file version

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control application – col. 90:35-49; reflect the status and Source Safe Usage: Check Out – col. 286:56 to col. 287:33; Source Safe Usage: Check In – col. 287:35-48).

As per claims 3-8 and 22-27, Underwood discloses the display of a class diagram, use case diagram, sequence diagram, collaboration diagram, state transition diagram, and activity diagram (col 97:24 to col. 98:50; interaction diagram = collaboration diagram and work flow/operation diagram=activity diagram).

As per claims 12-14 and 31-33, Underwood discloses that the step of invoking includes invoking the version control system to obtain a copy of the determined file from a central repository (Check Out - Fig. 110 and associated text and col. 286:55 to col. 287:34) and storing the copy of the determined file in a working directory (Check Out - Fig. 110 and associated text and col. 286:55 to col. 287:34), whereby access of the stored copy is restricted to read only (Fig. 108 and associated text and col. 286:9-15).

As per claims 15-16 and 34, Underwood discloses that the step of invoking includes invoking the version control system to acquire a copy of a most current version of a selected file from a central repository, to place the copy of the file in a working directory on a requesting computer, and to prevent others from checking out the file (Check Out - Fig. 110 and associated text and col. 286:55 to col. 287:34).

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As per claims 17-19 and 35-37, Underwood discloses that the step of invoking includes invoking the version control system to transfer a copy of a selected file from a working directory on a requesting computer to a central repository (Check In – Fig. 114-115 and associated text and col. 287:34-49), to synchronize a working copy of a selected file with a most current version of the file in a central repository (“changes can then be merged later” - col. 91:18-33; Check In – Fig. 114-115 and associated text and col. 287:34-49), and to commit changes made to a working copy of a selected file to a corresponding file on a central repository (“changes can then be merged later” - col. 91:18-33; Check In – Fig. 114-115 and associated text and col. 287:34-49).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Underwood (US006523027B1). As described in the above rejection of claim 1, Underwood discloses steps for generating a language- neutral representation of the source code, displaying a diagram . . . , receiving an indication of a selected one of the elements, determining which file is associated . . . , receiving an indication of a selection of a command . . . , and invoking the version control system Underwood fails to expressly disclose that the step of receiving an indication of a selection of an element includes the step of receiving an indication of a right-click of a mouse. However,

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Underwood discloses this feature as a part of the version control application (col. 287:20-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Underwood's step of selecting an element in a diagram by including the step of receiving an indication of a right-click of a mouse. One of ordinary skill in the art would have been motivated to do so in order to produce a pop-up menu of choices of actions to perform on the element (col. 287:20-27).

Claims 9-11 and 28-30 rejected under 35 U.S.C. 103(a) as being unpatentable over Underwood (US006523027B1) as applied to claims 1 and 21 above, and further in view of Fowler et al (UML Distilled). As described in the above rejections of claims 1 and 21, Underwood discloses steps and means for generating a language-neutral representation of the source code, displaying a diagram . . . , receiving an indication of a selected on of the elements, determining which file is associated . . . , receiving an indication of a selection of a command . . . , and invoking the version control system Underwood fails to expressly disclose the display of a package diagram, component diagram, and deployment diagram. However, Fowler et al discloses these features (diagrams on 115 and 144 and associated text). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Underwood by including the display of a package diagram, component diagram, and deployment diagram as per the teachings of Fowler et al. One of ordinary skill in the art would have been motivated to do so in order to "group classes together into higher-level units" in the case of a package diagram (pg. 113; diagram on pg. 115 and associated text) and in order to show "the physical relationships among software and hardware

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components in the delivered system" in the case of component and deployment diagrams (pg. 143; diagram on pg. 144 and associated text).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Curcio whose telephone number is 703-305-8887. The examiner can normally be reached on Tuesday to Friday from 7 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron, can be reached on Monday to Friday from 7:30 am to 4:30 pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



June 10, 2004
JC
AU 2122



**TUAN DAM
SUPERVISORY PATENT EXAMINER**